

REMARKS

At the outset, Applicant thanks the Examiner for the thorough review and consideration of the subject application. The Non-Final Office Action of December 18, 2003, has been received and its contents carefully noted. Claims 1-10 are currently pending in the application. By this amendment, claim 1, 3, and 5-10 are amended and the specification is amended. Support for these amendments are provided in at least Figures 1-4 and related text of the specification. No new matter has been added. Reconsideration of the rejected claims in view of the above amendments and the following remarks is respectfully requested.

Claim Objection

In the Office Action, claims 1-10 were objected to due to minor informalities. Claims have been amended to correct such informalities.

Accordingly, Applicant respectfully requests all the outstanding objections over claims 1-10 to be withdrawn.

Rejections Under 35 U.S.C. § 112, second paragraph

Claims 1-10 stand rejected under 35 U.S.C. § 112, second paragraph as being indefinite. Applicant respectfully traverses this rejection for at least the following reasons.

The Examiner rejected claims 1-10 as being indefinite by reciting it is unclear as to how the peripheral area having an upper region located above the display area and a lower region located below the display area when the peripheral area surrounds the display area and the

drawing depict the upper and lower repair lines being formed in one plane.” (Office Action at 3.)

Applicant respectfully directs the Examiner towards the § 2173.02 of the MPEP disclosing:

The essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity. Definiteness of claim language must be analyzed, not in a vacuum, but in light of:

- (A) The content of the particular application disclosure;
- (B) The teachings of the prior art; and
- (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

In reviewing a claim for compliance with 35 U.S.C. 112, second paragraph, the examiner must consider the claim as a whole to determine whether the claim apprises one of ordinary skill in the art of its scope and, therefore, serves the notice function required by 35 U.S.C. 112, second paragraph >by providing clear warning to others as to what constitutes infringement of the patent<. See, e.g., *Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000).

The allegedly indefinite portion of claim 1 reads as follows:

an insulating substrate including a display area and a peripheral area surrounding the display area, the peripheral area including an upper region arranged above the display area and a lower region arranged below the display area

When the claim elements are analyzed not in a vacuum, but rather in light of the context of the application and teachings of the prior art, one of ordinary skill in the art of its scope and, therefore, serves the notice function required by 35 U.S.C. 112, second paragraph. More specifically, there is a display area surrounded by a peripheral area. The peripheral area includes an upper arranged region above the display area and a lower region arranged below the display

area. For example and illustrations purposes, and as set forth in one embodiment of the invention, Figure 1 shows a display area 11 represented by a dashed line. The peripheral region is represented by an area surrounding the display area 11. That is, any region surrounding the display 11, which may or may not be in the same plane. One of ordinary skill in the art would readily ascertain the metes and bounds of claim 1.

Accordingly, Applicant respectfully requests withdrawal of the rejection as claim 1 and claims 9-10 which depend from claim 1, as claim 1 are in full compliance with 35 U.S.C. § 112, second paragraph.

Rejections Under 35 U.S.C. § 103

Claims 1-10 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,380,992 issued to Lee. Applicant respectfully traverses this rejection for at least the following reasons.

To establish a *prima facie* case of obviousness under §103, three basic criteria must be met. These criteria include:

1. The prior art reference (or references when combined) must teach or suggest all the claim limitations;
2. There must be some suggestion or motivation in the references themselves to modify the reference or to combine reference teachings; and
3. There must be a reasonable expectation of success for the modification or combination of references.

See Manual of Patent Examining Procedure (MPEP) § 2143 (8th Ed. Rev. 1, Feb. 2003)

Applicant submits that these criteria have not been established by the Examiner. In contrast, and although not expressly stated, it appears the Examiner is relying on official notice.

The Examiner may take official notice of facts outside of the record which are capable of instant and unquestionable demonstration as being "well-known" in the art. *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970). As set forth in MPEP § 2144.03, if an applicant traverses an assertion made by an Examiner while taking official notice, the Examiner should cite a reference in support of their assertion. More specifically, the Examiner uses official notice on the following combination of elements:

a plurality of first lower repair lines formed at the lower region of the substrate, connected to the corresponding first upper repair lines, wherein the first lower repair lines cross the signal lines crossed by the first upper repair lines;

a plurality of second lower repair lines formed at the lower region of the substrate, wherein the plurality of second lower repair lines cross all of the signal lines;

a plurality of upper connection members crossing the first upper repair lines and the second upper repair lines; and

a plurality of lower connection members crossing the first lower repair lines and the second lower repair lines. *See Office Action at 5.*

Applicant traverses each and every use of official notice and requests the Examiner to provide the requisite reference as required by MPEP § 2143 to cover the aforementioned limitations. In the alternative, Applicant respectfully requests clarification of the rejection pointing out where the foregoing limitations are taught by Lee.

Additionally, Lee fails to teach a combination of elements including, for example:

a plurality of second upper repair lines formed in the upper peripheral region of the substrate, wherein the second upper repair lines cross all of the signal lines;

In contradistinction, Lee is directed towards a display device having a defective pad repair structure and method for making the same. More specifically, Lee discloses in FIG. 8 and col. 4, lines 64 to col. 5, line 3 the following:

In the liquid crystal display device according to this embodiment, as shown in FIG. 8, if two of the data pads 121 in one of the pad groups 141 are broken at portions 122a and 123a, respectively, the broken data pads 121a and 121b are connected to the defective data pad repair lines 220a and 220b, respectively, at their respective cross points 123b, 123c and 122b and 122c through a welding process as in the first embodiment.

However, Lee does not show “the second upper repair lines cross all of the signal lines” as required by claim 1. Rather, as shown above, Lee merely shows a defective data pad repair lines 220a and 220b over only a few of the signal lines and not all of the data lines.

Accordingly, Applicant respectfully submits that claim 1 and claims 2-10, which depend from claim 1, are distinguishable over the cited art. Since none of the other prior art references of record disclose or suggest the combination of features set forth by these claims, it is respectfully submitted that claims 1-10 are allowable.

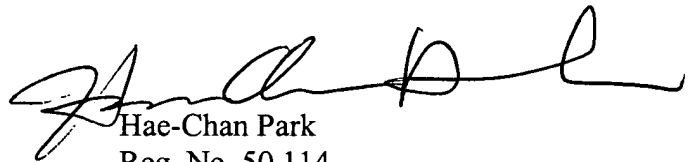
CONCLUSION

Applicant believes that a full and complete response has been made to the pending Office Action and respectfully submit that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicant respectfully submits that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,



Hae-Chan Park
Reg. No. 50,114

Date: March 16, 2004

McGuireWoods LLP
1750 Tysons Boulevard
Suite 1800
McLean, VA 22102-4215
Tel: 703-712-5365
Fax: 703-712-5280
HCP/SJH/jmp